4.P.1.1 Students are able to **describe** observable <u>physical changes</u> and <u>properties</u> in matter.

Webb Level: 2

Bloom: Comprehension

Verbs Defined:

Describe – tell in words and/or numbers

Kev Terms Defined:

Physical change – a change in the form of a substance Properties – characteristics that define or describe (solubility, density Matter – something which occupies space and has mass

Teacher Speak:

Students are able to describe (tell in words and/or numbers) observable physical changes (changes in the form of a substance)

Students are able to describe(tell in words and/or numbers) properties (characteristics that define or describe – solubility, density) of matter (something which occupies space and has mass).

Student Speak:

I can tell in words and/or numbers (describe) about changes in the form of a substance (physical change).

I can tell in words and/or numbers (describe) characteristics (properties) of something which occupies space and has mass (matter).

4.P.1.2 Students are able to **explain** how some <u>physical properties</u> remain the same as the mass is changed.

Webb Level: 3 Bloom: Analysis

Verbs Defined:

Explain – give reasons for

Key Terms Defined:

Physical properties – any characteristics of a material that can be observed without changing the identity of it

Mass – amount of matter an object contains

Teacher Speak:

Students are able to explain (give reasons for) how some physical properties (any characteristics of a material that can be observed without changing the identity of it) remain the same as the mass (amount of matter an object contains) is changed.

Student Speak:

I can give reasons for (explain) how characteristics of a material can be observed without changing the identity of it (physical properties) but the amount of matter an object has (mass) is changed.

4.P.1.3 Students are able to **differentiate** between the <u>states of matter</u> caused by changes in temperature using water.

Webb Level: 1

Bloom: Comprehension

Verbs Defined:

Differentiate – to tell the difference between

Key Terms Defined:

States of matter – solids, liquids, and gases

Teacher Speak:

Students are able to differentiate (to tell the difference between) the states of matter (solid, liquid, and gases) caused by changes in temperature using water.

Student Speak:

I can tell the difference between (differentiate) solids, liquids, and gases (matter) caused by changes in temperature using water.

4.P.2.1 Students are able to **demonstrate** how forces act over a distance.

Webb Level: 4 Bloom: Application

Verbs Defined:

Demonstrate – to show

Key Terms Defined:

Forces – a push or pull one body exerts on another

Teacher Speak:

Students are able to demonstrate (to show) how forces (a push or pull one body exerts on another) act over a distance.

Student Speak:

I can show (demonstrate) how a push or pull that one body exerts on another (forces) acts over a distance.

4.P.3.1 Students are able to **identify** materials as being <u>conductors</u> or <u>insulators</u> of electricity.

Webb Level: 2 Bloom: Knowledge

Verbs Defined:

Identify – to select from given information

Key Terms Defined:

Conductors – material through which electric current passes Insulators – material through which electric current does not easily pass

Teacher Speak:

Students are able to identify (to select from given information) materials as being conductors (material through which electric current passes) or insulators (material through which electric current does not easily pass) of electricity.

Student Speak:

I can select from given information (identify) which materials an electric current can pass through (conductor) or what materials do not allow an electrical current to pass through (insulator).

4.P.3.2 Students are able to **construct** and **define** a simple circuit.

Webb Level: 4 Bloom: Application

Verbs Defined:

Construct – to make

Define – to tell or write the meaning of

Key Terms Defined:

Simple circuit – a closed path through which electrons flow

Teacher Speak:

Students are able to construct (to make) and define (to write or tell the meaning of) a simple circuit (a closed path through which electrons flow).

Student Speak:

I can make (construct) and to tell or write the meaning of (define) a closed path through which electrons flow (simple circuit).

4.P.3.3 Students are able to **use** <u>magnets</u>, <u>electromagnets</u>, <u>magnetic fields</u>, and compasses to explore magnetic energy.

Webb Level: 4
Bloom: Application

Verbs Defined:

Use – use

Key Terms Defined:

Magnets – an object that attracts iron or steel

Electromagnets – a magnet made from a current carrying wire

Magnetic fields – the area around a magnet where the magnetic force acts

Compass – an instrument that tells direction

Magnetic energy – the push or pull of a magnet

Teacher Speak:

Students are able to use magnets (an object that that attracts iron or steel), electromagnets (a magnet made from a current carrying wire), magnetic fields (the area around a magnet where the magnetic force acts), and compasses (an instrument that tells direction) to explore magnetic energy (the push or pull of a magnet).

Student Speak:

I can explore the push or pull of a magnet (magnetic energy) by using

- an object that attracts iron or steel (magnets),
- a magnet made from a current carrying wire (electromagnets),
- the area around a magnet where the magnetic force acts (magnetic fields),
- an instrument that tells direction (compasses)

4.L.1.1. Students are able to **identify** the basic systems (digestive, skeletal, muscular, nervous, respiratory, and circulatory) and major organs.

Webb Level: 1

Bloom: Knowledge

Verbs Defined:

Identify – select from given information

Key Terms Defined:

None Defined

Teacher Speak:

Students are able to identify (select from given information) the basic systems (digestive, skeletal, muscular, nervous, respiratory, and circulatory) and major organs.

Student Speak:

I can select from given information (identify) the basic systems (digestive, skeletal, muscular, nervous, respiratory, and circulatory) and major organs.

4.L.1.2. Students are able to **differentiate** between <u>vertebrates</u> and <u>invertebrates</u>, and **classify** the five groups of vertebrates (mammal, reptile, amphibian, bird, and fish) based on characteristics.

Webb Level: 2

Bloom: Comprehension

Verbs Defined:

Differentiate – to tell the difference between Classify – to group

Key Terms Defined:

Invertebrates – organisms that do not have a backbone Vertebrates – organisms that have a backbone

Teacher Speak:

Students are able to differentiate (to tell the difference between) between vertebrates (organisms that have a backbone) and invertebrates (organisms that do not have a backbone), and classify (to group) the five groups of vertebrates (mammal, reptile, amphibian, bird, and fish) based on characteristics.

Student Speak:

I can tell the difference between (differentiate) organisms that have a backbone (vertebrates) and organisms that do not have a backbone (invertebrates), and group (classify) the five groups of vertebrates (mammal, reptile, amphibian, bird, and fish) based on characteristics.

4.L.2.1. Students are able to **identify** behavioral and structural <u>adaptations</u> that allow a plant or animal to survive in a particular environment.

Webb Level: 2

Bloom: Knowledge

Verbs Defined:

Identify – to select from given information

Key Terms Defined:

Adaptations – the characteristics of an organism that improves their chances for survival

Teacher Speak:

Students are able to identify (to select from given information) behavioral and structural adaptations (the characteristics of an organism that improves their chances for survival) that allow a plant or animal to survive in a particular environment.

Student Speak:

I can select from given information (identify) behavioral and structural characteristics of an organism that improves their chances for survival (adaptations) that allow a plant or animal to survive in a particular environment. **4.L.2.2.** Students are able to **explain** how a size of a <u>population</u> is dependent upon the available <u>resources</u> within its community.

Webb Level: 3 Bloom: Analysis

Verbs Defined:

Explain – to give reasons for

Key Terms Defined:

Population – a group of organisms in a specific habitat Resources – food, water, and shelter

Teacher Speak:

Students are able to explain (to give reasons for) how a size of a population (a group of organisms in a specific habitat) is dependent upon the available resources (food, water, and shelter) within its community.

Student Speak:

I can give reasons for (explain) how the size of a group of organisms in a specific habitat (population) is dependent upon the available food, water, and shelter (resources) within its community.

4.L.3.1. Students are able to **describe** the flow of energy through food chains and webs.

Webb Level: 2

Bloom: Comprehension

Verbs Defined:

Describe – to tell in words and/or numbers

Key Terms Defined:

Food chains and webs – interacting food chains

Teacher Speaks:

Students are able to describe (to tell in word and/or numbers) the flow of energy through food chains and food webs (interacting food chains).

Student Speaks:

I can tell in word and/or numbers (describe) the flow of energy through food chains and interacting food chains (food webs).

4.E.1.1. Students are able to **describe** the basic stages of the <u>water cycle</u>.

Webb Level: 1

Bloom: Comprehension

Verbs Defined:

Describe – to tell in words and/or numbers

Key Terms Defined:

Water cycle – evaporation, condensation, and precipitation

Evaporation – changes from a liquid to a gas

Condensation – the change of a substance from a gas to a liquid

Precipitation – a deposit on the earth of hail, mist, rain, sleet, or snow

Teacher Speak:

Students are able to describe (to tell in words and/or numbers) the basic stages of the water cycle (evaporation – changes from a liquid to a gas, condensation – the change of a substance from a gas to a liquid, and precipitation – a deposit on the earth of hail, mist, rain, sleet, or snow).

Teacher note – gas is used in place of vapor. Vapor needs to be introduced at this level, but not mastered.

Student Speak:

I can tell in words and/or numbers the basic stages of the water cycle:

- changes from a liquid to a gas (evaporation),
- the change of a substance from a gas to a liquid (condensation),
- a deposit on the earth of hail, mist, rain, sleet, or snow (precipitation).

4.E.1.2. Students are able to **describe** how weather conditions and <u>phenomena</u> occur and can be **predicted**

Webb Level: 2

Bloom: Comprehension

Verbs Defined:

Describe – to tell in words and/or numbers Predicted – to use information to make a best guess

Key Terms Defined:

Phenomena – an observable natural event that can have a positive or negative impact

Teacher Speak:

Students are able to describe (to tell in words and/or numbers) how weather conditions and phenomena (an observable natural event that can have a positive or negative impact) occur and can be predicted (to use information to make a best guess).

Student Speak:

I can tell in words and/or numbers (describe) how weather conditions and an observable natural event that can have a positive or negative impact (phenomena) occurs and can be used to make a best guess (predicted).

4.E.2.1. Students are able to **describe** the motions of Earth, Sun, and Moon.

Webb Level: 1

Bloom: Comprehension

Verbs Defined:

Describe – to tell in words and/or numbers

Key Terms Defined:

Motion – revolution and rotation

Revolution – movement of one object around another object

Rotation – one full spin of an object around an axis

Teacher Speak:

Students are able to describe (to tell in words and/or numbers) the motions (revolution and rotation) of Earth, Sun, and Moon.

Student Speak:

I can tell in words and/or numbers (describe) the movement of one object around another object (revolution) and the spin of another object around an axis (rotation) (motion) of the Earth, Sun, and Moon.

4.S.1.1. Students are able to **describe** how people continue to invent new ways of doing things, solving problems, and getting work done.

Webb Level: 3

Bloom: Comprehension

Verbs Defined:

Describe – to tell in words and/or numbers

Key Terms Defined:

None defined

Teacher Speak:

Students are able to describe (to tell in words and/or numbers) how people continue to invent new ways of doing things, solving problems, and getting work done.

Student Speak:

I can tell in words and/or numbers (describe) how people continue to invent new ways of doing things, solving problems, and getting work done.

4.S.1.2. Students are able to **explain** how new ideas and inventions often affect people.

Webb Level: 3

Bloom: Comprehension

Verbs Defined:

Explain – give reasons

Key Terms Defined:

None defined

Teacher Speak:

Students are able to explain (give reasons) how new ideas and inventions often affect people.

Student Speak:

I can give reasons (explain) as to how new ideas and inventions often affect people.